

Amendments to the Claims under 37 C.F.R. § 1.121

Claim 1 (currently amended): A reagent for detecting human papilloma virus (HPV) DNA in a cell sample which indicates the patient providing the cell sample is at risk for cancer, comprising a plurality of genomic HPV DNA probe sets; wherein:

(a) a first genomic HPV DNA probe set comprises a plurality of nucleic acid fragments having different nucleotide sequences that detectably hybridize to a plurality of different nucleotide sequences of essentially the ~~entire~~-full-length genomic sequence of HPV type 16,

(b) a second genomic HPV DNA probe set comprises a plurality of nucleic acid fragments having different nucleotide sequences that detectably hybridize to a plurality of different nucleotide sequences of essentially the ~~entire~~-full-length genomic sequence of HPV type 18,

(c) a third genomic HPV DNA probe set comprises a plurality of nucleic acid fragments having different nucleotide sequences that detectably hybridize to a plurality of different nucleotide sequences of essentially the ~~entire~~-full-length genomic sequence of HPV type 31,

(d) a fourth genomic HPV DNA probe set comprises a plurality of nucleic acid fragments having different nucleotide sequences that detectably hybridize to a plurality of different nucleotide sequences of essentially the ~~entire~~-full-length genomic sequence of HPV type 33,

(e) a fifth genomic HPV DNA probe set comprises a plurality of nucleic acid fragments having different nucleotide sequences that detectably hybridize to a plurality of different nucleotide sequences of essentially the ~~entire~~-full-length genomic sequence of HPV type 35, and

(f) a sixth genomic HPV DNA probe set comprises a plurality of nucleic acid fragments having different nucleotide sequences that detectably hybridize to a plurality of different nucleotide sequences of essentially the ~~entire~~-full-length genomic sequence of HPV type 51;

and wherein the nucleic acid fragments of the genomic HPV DNA probe sets do not detectably hybridize to the genomic sequence of a low-risk HPV type.

Claim 2 (cancelled).

Claim 3 (previously presented): The reagent of claim 1, wherein the nucleic acid fragments of the genomic HPV DNA probe sets also hybridize to the genomic sequence of HPV types 39, 45, 52, 56, 58, 59, 68 and 70.

Claims 4-6 (cancelled).

Claim 7 (previously presented): The reagent of claim 1, wherein the nucleic acid fragments comprising each genomic HPV DNA probe set are present in the reagent in the following proportions as a percent of total HPV DNA in the reagent: HPV 16 - 8.3%, HPV 18 - 20.8%, HPV 31 - 8.3%, HPV 33 - 20.8%, HPV 35 - 20.8%, and HPV 51 - 20.8%.

Claim 8-16 (cancelled).

Claim 17 (previously presented): A kit for detecting human papilloma virus DNA in a sample comprising a container containing the reagent of claim 1.

Claim 18 (cancelled).

Claim 19 (previously presented): A kit for detecting human papilloma virus DNA in a sample comprising a container containing the reagent of claim 3.

Claims 20-21 (cancelled).

Claim 22 (previously presented): A kit for detecting human papilloma virus DNA in a

sample comprising a container containing the reagent of claim 7.